

1683  
of

O B S E R V A T I O N S

• U P O N T H E  
B U D D I N G B I L L S

O F  
M O R T A L I T Y,

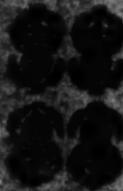
M D C L X X X I

AND THE  
S T A T E o f th a t C I T Y.

---

By the Observator on the L O N D O N  
Bills of M O R T A L I T Y.

---



---

L O N D O N.

Printed for Mark Pardoe, in the Sign of  
the Black Raven, over against Bedford-  
house in the Strand. 1683.

Yearly Bills of Mortality for

LONDON and DUBLIN.

| Anno.  | LONDON.  |         | DUBLIN.  |         | LONDON.  |         | DUBLIN.  |         |
|--------|----------|---------|----------|---------|----------|---------|----------|---------|
|        | Burials. | Births. | Burials. | Births. | Burials. | Births. | Burials. | Births. |
| 1680   | 21053    | 12747   | 1826     | 1096    | 11039    | 10044   | 6543     | 6199    |
| 1679   | 21730    | 12288   | 1397     | 1061    | 11154    | 10576   | 6247     | 6041    |
| 1678   | 20678    | 12601   | 1401     | 1045    | 10681    | 9977    | 6568     | 6033    |
| 1674   | 21201    | 11851   | 2106     | 942     | 11000    | 10196   | 6113     | 5738    |
| 1672   | 18230    | 12563   | 1436     | 987     | 9560     | 8070    | 6443     | 6120    |
| 1668   | 17278    | 11633   | 1699     | 1026    | 9114     | 8167    | 6073     | 5566    |
| 120170 | 73683    | 9865    | 6157     | 1026    | 62545    | 57030   | 37992    | 35697   |
| 20028  | 12280    | 1644    | 10424    | 9505    | 10424    | 9505    | 6332     | 5940    |

The medium or  
part whereof is

A

DUBLIN.

| Anno. | DUBLIN.  |         | In Ternaries<br>of years. |         |
|-------|----------|---------|---------------------------|---------|
|       | Burials. | Births. | Burials.                  | Births. |
| 1666  | 1480     | 952     | 4821                      | 2979    |
| 1667  | 1642     | 1001    |                           |         |
| 1668  | 1699     | 1026    |                           |         |
| 1669  | 1666     | 1000    |                           |         |
| 1670  | 1713     | 1067    | 5353                      | 3070    |
| 1671  | 1974     | 1003    |                           |         |
| 1672  | 1436     | 967     | 5073                      | 2842    |
| 1673  | 1531     | 933     |                           |         |
| 1674  | 2106     | 942     |                           |         |
| 1675  | 1578     | 823     |                           |         |
| 1676  | 1391     | 952     | 4328                      | 2672    |
| 1677  | 1259     | 897     |                           |         |

B

|      |       |       |       |
|------|-------|-------|-------|
| 1673 | 1570  | 823   |       |
| 1676 | 1391  | 952   | 4328  |
| 1677 | 1359  | 897   | 2672  |
| 1678 | 1401  | 1045  |       |
| 1679 | 1397  | 1061  | 4624  |
| 1680 | 1826  | 1096  | 3202  |
|      | 24199 | 14765 | 14765 |
|      | 1613  | 984   | 1613  |
|      |       |       | 984   |

The medium over  
part whereof is

### The Parishes of D O B L I N.

| Anno 1671.   |           |          |         |
|--|-----------|----------|---------|
| Anno 1670, 71, & 72.<br>at a Medium.                   |           |          |         |
|  | Families. | Hearths. | Births. |
| 1 St. Katharine and St. James,                         | 661       | 2399     | 161     |
| 2 St. Nicholas without,                                | 490       | 2348     | 207     |
| 3 St. Michaels,  | 656       | 2301     | 127     |
| 4 St. Andrews with Donabrook,                          | 483       | 2123     | 108     |
| 5 St. Bridgets,  | 416       | 1989     | 70      |
| 6 St. Johns,   | 244       | 1337     | 70      |
| 7 St. Warbrough,                                       | 267       | 1650     | 54      |
| 8 St. Audaeans,  | 216       | 1081     | 53      |
| 9 St. Michael,   | 140       | 793      | 44      |
| 10 St. Keverens,                                       | 106       | 433      | 64      |
| 11 St. Nicholas within,                                | 93        | 614      | 28      |
| 12 St. Patrick's Liberties,                            | 52        | 255      | 21      |
| 13 Christ-Church and Trinity-Colledge per estimate,    | 26        | 197      |         |
| Houses built between 1671, and 1681, and pre-estimate, |           |          |         |
|  | 3850      | 17500    | 1013    |
|  | 150       | 550      | 1696    |
|  | 4000      | 18150    |         |

## Beginning

## PARISHES Names.

- 1 St. Katherins and St. James,
- 2 St. Nicholas without,
- 3 St. Michans,
- 4 St. Andrews with Donabrook,
- 5 St. Bridgets,
- 6 St. Johns,
- 7 St. Warbrough,
- 8 St. Audaens,
- 9 St. Michael,
- 10 St. Keavens,
- 11 St. Nicbolas within,
- 12 St. Patrick's Liberties,
- 13 Christ-Church and Trinity-Colledge,

---

Totals,

A Quarterly Bill of Mortality,  
and ending  
for the City of *Dublin*.

|   |                          |
|---|--------------------------|
|   | All other<br>Casualties. |
| Infants under<br>2 years old.                       |                          |
| Aged above<br>70 years old.                         |                          |
| Sudden death,<br>Quinsay,<br>Plurisie,<br>Fever.    |                          |
| Stone,<br>Gout,<br>Dropie,<br>Consumption.          |                          |
| Plague,<br>Small Pox,<br>Spotted Fever,<br>Measles. |                          |
| Above 60<br>years old.                              |                          |
| Under 16<br>years old.                              |                          |
| Marriages.  |                          |
| 2.  |                          |
| Births.   |                          |
| 1.  |                          |

BBQ A

# A Weekly Bi Endi

## PARISHES Na

- 1 St. Katherins and St.
- 2 St. Nicholas without,
- 3 St. Michans,
- 4 St. Andrews with Don
- 5 St. Bridgets,
- 6 St. Johns,
- 7 St. Warbrougk,
- 8 St. Audaens,
- 9 St. Michael,
- 10 St. Keavens,
- 11 St. Nicholas within,
- 12 St. Patrick's Liberties
- 13 Christ-Church and Colledge,

To

## Bill of Mortality for the City of *Dublin*,

## Ending the day of

168 i.

|                                 |  |  |  |  |
|---------------------------------|--|--|--|--|
| S Names.                        |  |  |  |  |
| nd St. James,<br>thout,         |  |  |  |  |
| th Donabrook,                   |  |  |  |  |
| hin,<br>erties,<br>and Trinity- |  |  |  |  |
| Totals,                         |  |  |  |  |

# A Weekly Bill of

Parishes Names

## PARISHES Names

12 St. Michael without 26 Years  
2 St. Mary without  
3 St. Nicholas  
4 St. Peter  
5 St. Paul without  
6 St. James with Donabrook  
7 St. Bridgets  
8 St. Johns  
9 St. Warbrough,  
10 St. Michael  
11 St. Nicholas within,  
12 St. Patrick's Liberties,  
13 Christ-Church and Trinity-  
Colledge

# An Account o

En

## PARISHES Names.

---

- 1 St. Katherins and St. James,
- 2 St. Nicholas without,
- 3 St. Michans,
- 4 St. Andrews with Donabrook,
- 5 St. Bridgets,
- 6 St. Johns,
- 7 St. Warbrough,
- 8 St. Audaens,
- 9 St. Michael,
- 10 St. Keavens,
- 11 St. Nicholas within,
- 12 St. Patrick's Liberties,
- 13 Christ-Church and Trinity-  
Colledge,

---

Totals,

A  
Al  
C  
Co  
T  
W  
G  
St  
Pa  
C  
D  
R

t of the People of Dublin for one year,

Ending the 24th of March, 1682.

| Marriages.             | Burials. | Births.     | Deaths.            | Deaths.            | Deaths.            |
|------------------------|----------|-------------|--------------------|--------------------|--------------------|
| Or all other Religions | Papists  | Protestants | Persons of<br>old. | Persons of<br>old. | Persons of<br>old. |
| Whereof                | Whereof  | Whereof     | Above 60 years     | Under 60 years     | Under 16 years     |
| { Females.             | { Males. | { Males.    |                    |                    |                    |
| Number of Persons.     |          |             |                    |                    |                    |

## Casualties and Diseases.

|                                 |
|---------------------------------|
| Aged above 70 years.            |
| Abortive and Still-born.        |
| Childbed-women.                 |
| Convulsion.                     |
| Teeth.                          |
| Worms.                          |
| Gout, and Sciatica.             |
| Stone.                          |
| Palsey.                         |
| Consumption, and French<br>Pox. |
| Dropsey, and Tympany.           |
| Rickets, and Livergrown.        |

|                                 |
|---------------------------------|
| Head-ach, and Megrim.           |
| Epilepsie, and Planet.          |
| Fever, and Ague.                |
| Pleurisie.                      |
| Quinsy.                         |
| Executed, Murder'd, Drown'd     |
| Plague, and Spotted-Fever.      |
| Gripling of the Guts.           |
| Scowring, Vomiting, Bleeding.   |
| Small Pox.                      |
| Measels.                        |
| Neither of all the other sorts. |



O B S E R V A T I O N S  
 UPON THE  
 D U B L I N - B I L L S of Mortality, 1681.  
 AND THE  
 State of that C I T Y

**T**HE Observations upon the *London Bills* of Mortality have been a very Light to the World; and the like Observation upon those of *Dublin*, may serve as Smoother to make the same Candle burn clearer.

The *London*-Observations flowed from Bills regularly kept for near One hundred years; but these are squeezed out of Six *Irish* *London*-Bills, out of Fifteen *Dublin*-Bills, and from a Note of the *Parishes* and *Barbys* in each *Parish* of *Dublin*; which are all digested into the one *Table* or Sheet annexed, consisting of Three Parts, marked by A, B, C, being indeed the A, B, C, of *Publick* *conomy*, and even of that *Policy* which *insures* *Peace* and *Plenty*.

*Observations upon the Table A.*

1. **T**he Total of the Burials in *London*, (for the said Six stragling years mentioned in the Table A) is 120170; whereof the Medium or Sixth part is 20028; and exceeds the Burials of *Paris*, as may appear by the late Bills of that City.

2. The *Births*, for the same time, are 73683, the Medium or Sixth part whereof is 12280, which is about Five eighth parts of the *Burials*; and shews, that *London* would in time decrease quite away, were it not supplied out of the *Country*, where are about Five *Births* for Four *Burials*, the proportion of Breeders in the *Country* being greater than in the *City*.

3. The *Burials* in *Dublin* for the said Six years, were 9865, the Sixth part or Medium whereof is, 1644, which is about the Twelfth part of the *London* Burials; and about a Fifth part over. So as the people of *London* do hereby seem to be above Twelve times as many as those of *Dublin*.

4. The *Births* in the same time at *Dublin*, are 6157, the Sixth part or Medium whereof is 1026, which is also about five eighth parts of the 1644 Burials; which shews, that the propor-

proportion between *Burials* and *Births* are alike at *London* and *Dublin*, and that the Accompts are kept alike; and consequently are likely to be true, there being no Confederacy for that purpose: Which if they be true, we then say,

5. That the *Births* are the best way (till the Accompts of the people shall be purposefully taken) whereby to judge of the Increase and Decrease of People, that of *Burials* being subject to more Contingencies and variety of Causes.

6. If *Births* be as yet the measure of the People, and that the *Births* (as has been shewn) are as Five to Eight, then Eight fifths of the *Births* is the number of the *Burials*, where the year was not considerable for extraordinary Sickness or Salubrity; and is the Rule whereby to measure the same. As for Example: The Medium of *Births* in *Dublin* was 1026, the Eight fifths whereof is 1641, but the real *Burials* were 1644; so as in the said years they differed little from the 1641, which was the Standard of Health; and consequently, the years 1680, 1674, and 1668, were sickly years, more or less, as they exceeded the said Number 1641; and the rest were healthful years, more or less, as they fell short of the same number. But the City was more or less populous, as the *Births* dif-

red from the Number 1026; viz. Population in the years 1680, 1679, 1678, & 1668: For other causes of this difference in Births, are very occult and uncertain.

7. What hath been said of *Dublin*, serveth also for *London*.

8. It hath already been observ'd by the *London-Bills*, That there are more *Males* than *Females*. It is to be further noted, that in these Six *London-Bills* also, there is not one instance either in the Births or Burials to the contrary.

9. It hath been formerly observ'd, That in the years wherein most dye, fewest are born, & vice versa. The same may be further observ'd in *Males* and *Females*, viz. When fewest *Males* are born, then most dye: for here the *Males* dyed as *Twelve* to *Eleven*, which is above the mean proportion of *Fourteen* to *Thirteen*; but were born but as *Nineteen* to *Eighteen*, which is below the same.

### *Observations upon the Table B.*

1. From the Table B, it appears, That the Medium of the Fifteen years Burials, (being 24199) is 1613. whereas the Medium of the other six years in the Table A, was 1644, and that the Medium of the Fifteen years

years Births (being in all 14765) is 984, whereas the Medium of the said other six years, was 1026. That is to say, there were both fewer Births and Burials in these Fifteen years, than in the other six years; which is a probable sign that at a Medium there were fewer People also.

2. The Medium of *Births* for the Fifteen years being 984, whereof Eight fifths (being 1576) is the *standard of Health* for the said Fifteen years; and the triple of the said 1576, being 4728, is the standard for each of the Ternaries of the Fifteen years within the said Table.

3. That 2952, the triple of 984 Births, is for each Ternary the Standard of Peoples increase and decrease from the year 1666 to 1680 inclusive, *viz.* The People increased in the second Ternary, and decreased from the same in the Third and Fourth Ternarys, but re-increased in the Fifth Ternary beyond any other.

4. That the last Ternary was withal very healthful, the Burials being but 4624, *viz.* below 4728, the Standard.

5. That according to this proportion of increase, the Housing of *Dublin* have probably increased also.

## Observations upon the Table C.

1. **F**irst, from the Table C, it appears, 1. That the Housing of Dublin is such, as that there are not five Hearths in each House one with another, but nearer five than four.
2. That in St. Warburgh's Parish are near six Hearths to an House. In St. Johns five. In St. Michaels above five. In St. Nicholas within above six. In Christ-Church above seven. In St. James's, and St. Katherines, and in St. Michans, not four. In St. Kevans about four.
3. That in St. James's, St. Michans, St. Brides, St. Warburgh, St. Andrews, St. Michaels, and St. Patricks, all the Christnings were but 550, and the Burials 1055, *viz.* near double; and, that in the rest of the Parishes the Christnings were five, and the Burials seven, *viz.*, 457 to 634. Now whether the cause of this difference were negligence in Accompts, or the greatness of the Families, &c. is worth inquiring.
4. It is hard to say in what order (as to greatness) these Parishes ought to stand, some having most Families; some most Hearths, some most Births, and others most Burials. Some Parishes exceeding the rest in two, others

others in three of the said four particulars, but none in all four. Wherefore this Table ranketh them according to the plurality of the said four particulars wherein each excelleth the other.

5. The *London-Observations* reckon eight heads to be in each Family; according to which estimation, there are 32000 Souls in the 4000 Families of *Dublin*; which is but half of what most Men imagine; of which but about one sixth part are able to bear Arms, besides the Royal Regiment.

6. Without the knowledge of the true number of People, as a Principle, the whole scope and use of the keeping Bills of Births and Burials is impaired; wherefore by laborious Conjectures and Calculations to deduce the number of People from the Births and Burials, may be Ingenious, but very preposterous.

7. If the number of *Families in Dublin* be about 4000, then Ten Men, in one week (at the Charge of about Five pound, Surveying Eight Families in an hour) may directly, and without Algebra, make an Accomp<sup>t</sup> of the whole People, expressing their several Ages, Sex, Marriages, Title, Trade, Religion, &c. and those who survey the Hearths, or the Constables or Parish-Clarks, (may, if required) do the same *ex Officio*, and without o-

the Charge, by the  
Governor, the Director, or  
8. The Bills of ~~Damages~~ have, from the  
beginning, admitted several Alterations and  
Improvements; and eight or ten  
years furcharge, would make the Bill of  
Dublin to exceed all others, and be an  
excellent Instrument of Government, for  
which purpose the Forms for Weekly, Qua-  
terly, and Yearly Bills are humblye recom-  
mended, viz.

ed bl. & L. 1611. in which is a copy of this book  
which is written in Latin with French  
titles and words, and is divided into  
six volumes, and is written in a very  
**POSTSCRIPT**  
TO THE  
STATIONER.

**W**Hereas you complain, that these Observations make no sufficient Bulk, I could answer you, That I wish the Bulk of all Books were less; but do nevertheless comply with you in adding what follows, *viz.*

1. That the Parishes of *Dublin* are very unequal; some having in them above Six hundred Families, and others under Thirty.
2. That Thirteen Parishes are too few for Four thousand Families; the middling Parishes of *London* containing One hundred and twenty Families;

*A Postscript to the Stationer.*

cording to which rate, there should be about Thirty three Parishes in *Dublin*.

3. It is said, that there are Eighty four thousand Houses or Families in *London*, which is Twenty one times more than are in *Dublin*; and yet the Births and Burials of *London* are but Twelve times those of *Dublin*: which shews, that the Inhabitants of *Dublin* are more crowded and straitned in their Housing, than those of *London*; and consequently, that to increase the Buildings of *Dublin*, will make that City more conformable to *London*.

364. I shall also add some Reasons for altering the present forms of the *Dublin-Bills* of Mortality, according to what hath been here recommended,  
*viz.* *no Bur. without Births.*

1. We give the distinctions of Males and Females in the Births onely; for that the Burials must, at one time or another, be in the same proportion with the Births.

2. We do in the Weekly and Quarterly Bills propose, that notice be taken in the Burials of what numbers dye above Sixty and Seventy, and what under Sixteen, Six, and Two years old ; foreseeing good uses to be made of that distinction.

3. We do in the Yearly Bill, reduce the Casualties to about Twenty four, being such as may be discerned by common sense and without Art ; conceiving that more will but perplex and imbroil the Account. And in the Quarterly Bills, we reduce the Diseases to Three Heads, *viz.* Contagious, Acute, and Chronical ; applying this distinction to Parishes, in order to know how the different Scituation, Soil, and way of living in each Parish, doth dispose Men to each of the said Three Species : and in the Weekly Bills we take notice not only of the Plague, but of the other Contagious Diseases in each Parish ; that strangers and fear-  
ful

61. *Perpetual* *Leviathan* *now to*  
62. *the* *Leviathan* *now to*  
63. *the* *Leviathan* *now to*  
64. *the* *Leviathan* *now to*  
65. *the* *Leviathan* *now to*  
66. *the* *Leviathan* *now to*  
67. *the* *Leviathan* *now to*  
68. *the* *Leviathan* *now to*  
69. *the* *Leviathan* *now to*  
70. *the* *Leviathan* *now to*  
71. *the* *Leviathan* *now to*  
72. *the* *Leviathan* *now to*  
73. *the* *Leviathan* *now to*  
74. *the* *Leviathan* *now to*  
75. *the* *Leviathan* *now to*  
76. *the* *Leviathan* *now to*  
77. *the* *Leviathan* *now to*  
78. *the* *Leviathan* *now to*  
79. *the* *Leviathan* *now to*  
80. *the* *Leviathan* *now to*  
81. *the* *Leviathan* *now to*  
82. *the* *Leviathan* *now to*  
83. *the* *Leviathan* *now to*  
84. *the* *Leviathan* *now to*  
85. *the* *Leviathan* *now to*  
86. *the* *Leviathan* *now to*  
87. *the* *Leviathan* *now to*  
88. *the* *Leviathan* *now to*  
89. *the* *Leviathan* *now to*  
90. *the* *Leviathan* *now to*  
91. *the* *Leviathan* *now to*  
92. *the* *Leviathan* *now to*  
93. *the* *Leviathan* *now to*  
94. *the* *Leviathan* *now to*  
95. *the* *Leviathan* *now to*  
96. *the* *Leviathan* *now to*  
97. *the* *Leviathan* *now to*  
98. *the* *Leviathan* *now to*  
99. *the* *Leviathan* *now to*  
100. *the* *Leviathan* *now to*

5. *Wey* *now to*  
6. *Wey* *now to*  
7. *Wey* *now to*  
8. *Wey* *now to*  
9. *Wey* *now to*  
10. *Wey* *now to*  
11. *Wey* *now to*  
12. *Wey* *now to*  
13. *Wey* *now to*  
14. *Wey* *now to*  
15. *Wey* *now to*  
16. *Wey* *now to*  
17. *Wey* *now to*  
18. *Wey* *now to*  
19. *Wey* *now to*  
20. *Wey* *now to*  
21. *Wey* *now to*  
22. *Wey* *now to*  
23. *Wey* *now to*  
24. *Wey* *now to*  
25. *Wey* *now to*  
26. *Wey* *now to*  
27. *Wey* *now to*  
28. *Wey* *now to*  
29. *Wey* *now to*  
30. *Wey* *now to*  
31. *Wey* *now to*  
32. *Wey* *now to*  
33. *Wey* *now to*  
34. *Wey* *now to*  
35. *Wey* *now to*  
36. *Wey* *now to*  
37. *Wey* *now to*  
38. *Wey* *now to*  
39. *Wey* *now to*  
40. *Wey* *now to*  
41. *Wey* *now to*  
42. *Wey* *now to*  
43. *Wey* *now to*  
44. *Wey* *now to*  
45. *Wey* *now to*  
46. *Wey* *now to*  
47. *Wey* *now to*  
48. *Wey* *now to*  
49. *Wey* *now to*  
50. *Wey* *now to*  
51. *Wey* *now to*  
52. *Wey* *now to*  
53. *Wey* *now to*  
54. *Wey* *now to*  
55. *Wey* *now to*  
56. *Wey* *now to*  
57. *Wey* *now to*  
58. *Wey* *now to*  
59. *Wey* *now to*  
60. *Wey* *now to*  
61. *Wey* *now to*  
62. *Wey* *now to*  
63. *Wey* *now to*  
64. *Wey* *now to*  
65. *Wey* *now to*  
66. *Wey* *now to*  
67. *Wey* *now to*  
68. *Wey* *now to*  
69. *Wey* *now to*  
70. *Wey* *now to*  
71. *Wey* *now to*  
72. *Wey* *now to*  
73. *Wey* *now to*  
74. *Wey* *now to*  
75. *Wey* *now to*  
76. *Wey* *now to*  
77. *Wey* *now to*  
78. *Wey* *now to*  
79. *Wey* *now to*  
80. *Wey* *now to*  
81. *Wey* *now to*  
82. *Wey* *now to*  
83. *Wey* *now to*  
84. *Wey* *now to*  
85. *Wey* *now to*  
86. *Wey* *now to*  
87. *Wey* *now to*  
88. *Wey* *now to*  
89. *Wey* *now to*  
90. *Wey* *now to*  
91. *Wey* *now to*  
92. *Wey* *now to*  
93. *Wey* *now to*  
94. *Wey* *now to*  
95. *Wey* *now to*  
96. *Wey* *now to*  
97. *Wey* *now to*  
98. *Wey* *now to*  
99. *Wey* *now to*  
100. *Wey* *now to*

FURTHER  
OBSERVATION

---

UPON THE

**Dublin Bills:**

OR,  
ACCOMPTS

of the  
Housles, Hearths, Baptisms,

And Burials in that

City of Dublin, in the County of

**DUBLIN**

Carrying on the Observation

---

*The Second Edition, Corrected and Enlarg'd.*

---

By Sir **WILLIAM PETT,**  
Fellow of the Royal Society.

---

1686. LONDON: Printed for the Author.

Printed for Mark Pardoe, at the Sign of  
the Black Raven, over-against Bed-  
ford-House in the Strand. 1686.

THE  
TABULAR  
OBSESSION

UPON THE

THE  
TABULAR  
OBSESSION  
TO THE

READER.

I have not thought fit  
to make any Altera-  
tion of the first Edition,  
but have only added a  
New Table with Observa-  
tion upon it, placing the  
same in the front of what  
was before; which perhaps  
might have been as well  
placed after the like Table  
at the 8th Page of the  
first Edition.

Printed for Mary Palmer  
and Peter Sellars, over  
the Black Bull in the Strand.  
1681.

| St. John's Parish, alias                 | Houses | Hearths | Baptiz'd | Bur'd. |
|--|--------|---------|----------|--------|
| St. James, alias St. John's              | 672    | 8362    | 12110    | 306    |
| St. Katherine's alias St. John's         | 549    | 2198    | 1020     | 284    |
| St. Nicholas with-<br>out, and           | 1864   | 4082    | 145      | 414    |
| St. Patrick's alias St. John's           | 913    | 203     | 103      | 30     |
| St. Bridget's                            | 1995   | 1903    | 680      | 49     |
| St. Audries                              | 1376   | 1519    | 562      | 164    |
| St. Michael                              | 174    | 884     | 34       | 50     |
| St. John's                               | 392    | 1636    | 74       | 101    |
| St. Nicholas within,<br>and St. Laurence | 893    | 1902    | 26       | 52     |
| Christ-Church Library                    | 911    | 1107    | 11       | 1      |
| St. Warbors                              | 249    | 1638    | 45       | 105    |
| St. Michans                              | 938    | 3516    | 124      | 389    |
| St. Andrews                              | 884    | 3638    | 131      | 300    |
| St. Kevins alias St. Laurence            | 554    | 12120   | 87       | 233    |
| Pembroke                                 | 253    | 5063    | 11       | 1      |
| St. John's alias St. John's              | 6925   | 25369   | 972      | 2263   |

Further Observations upon the Dublin  
Accompts of Baptiz'ds and Bur'ds,  
Houses and Hearths, viz.

The Table hath been made for the  
Year 1682, wherein is to be noted,  
1. The

1. That the Houses which *Anno 1671*, were but 3850 are *Anno 1682*, 6025; but whether this difference is caused by the real encrease of Housing, or by fraud and defect in the former Accompts, is left to considerati-  
on. For the Burials or People have increased but from 1696, to 2263, according to which proportion, the 3850 Houses *Anno 1671*, should *Anno 1682* have been but 5143, wherefore some fault may be suspected as aforesaid, when Farming the Hearth-mony was in agitation.

2. The Hearths have increased according to the Burials, and  $\frac{1}{3}$  of the said increase more, *viz.* The Burials *Anno 1671* were 1696, the  $\frac{1}{3}$  whereof is 563, which put together makes 2259, which is near the number of Burials *Anno 1682*. But the Hearths *Anno 1671*, were 17500, whereof the  $\frac{1}{3}$  is 5833, making in all but 23333; whereas the whole Hearths

*Anno 1680* were 55369, viz.  $\frac{1}{4}$  and better of the said 5833 more.

3. The Housing were *Anno 1671*, but 3850, which if they had increased *Anno 1682* but according to the Burials, they had been but 5143, or according to the Hearths, had been but 5488, whereas they appear 6025, increasing double to the Hearths. So as 'tis likely there hath been some error in the said Account of the Housing, unless the new Housing be very small, and have but one Chimney apiece, and that  $\frac{1}{4}$  part of them are untenanted. On the other hand, 'tis more likely that when 1696 dy'd per An. there were near 6000; for 6000 Houses at 8 Inhabitants per House, would make the number of the People to be 48 Thousand, and the number of 1696 that died according to the Rule of One out of 30, would have made the number of Inhabitants about 50 Thousand. For which reason I continue to be-

[18]  
and by estimation of some English in the  
Accompt of 1585, of Johnstone before said;  
and the same we find there is no  
second sume expected to chuse that  
year by reason of the Hentes at Dublin have  
increased from 8400 to 6000, also in  
Midredover; I rather think that the  
number of 6000 is yet shote, because  
the number at 81 heads per House  
makes the inhabitants to be but 48200;  
and next the 2263 who died in the  
Month of August according to the afores-  
aid sume should be more dying out of  
the houses the number of People to be  
left by this Medium between which  
and benland 48200 is 1098045, which  
is the best estimation I can make of that  
country which I hope Authority will  
be ingredisse I my direct and exact  
estimation and in 91 houses I have  
and Aduril this Bunting we saye that  
there were 1091644, and 16448 as I can  
well saye in dede the Troubles in Reli-  
gion notwithstanding the Births were 3 of the  
Bur-

[52]

Burials, by reason of the loss of the  
greater part of the entries in the original  
bible of the Country, and the non-legal  
Baptisms, and non-legal entries of  
Burials, which were until of Regis-  
tering. ~~but~~ What follows is for the year 1682  
2263, which is 377, ~~the~~ <sup>the</sup> part made  
1886 for the probable number of  
Births in *Dublin* for the year 1682;   
whereas but 912 are represented to  
have been Christen'd in that year,   
though 1023 were Christen'd *Anno*  
1671, when there died but 1696;   
which decreasing of the Christnings,   
and increasing of the Burials, shews  
the increase of Non-registering in the  
Legal Books, which must be the increase  
of *Roman Catholicks* at *Dublin*.

The scope of this whole Paper there-  
fore is, That the People of *Dublin* are  
rather 58000, than 32000; and that  
the Dissenters, who do not Register  
their Baptisms, have increased from  
391 to 974: but of Dissenters, none  
have

have increased but the Roman Catholicity, whose Numbers have increased from about 2 to 5 in the said Year. The exact Knowledge whereof, may also be better had from direct Enquiries.

**F I N I S.**

O B S E R V A T I O N S  
 U P O N T H E  
**D U B L I N-Bills of Mortality, 1681.**  
 A N D T H E  
 State of that C I T Y

**T**H E Observations upon the *London-Bills of Mortality* have been a new Light to the World; and the like Observation upon those of *Dublin*, may serve as Snuffers to make the same Candle burn clearer.

The *London-Observations* flowed from *Bills* regularly kept for near One hundred years; but these are squeezed out of Six stragling *London-Bills*, out of Fifteen *Dublin Bills*, and from a Note of the *Families and Hearths* in each *Parish* of *Dublin*; which are all digested into the one *Table* or *Sheet* annexed, consisting of Three Parts, mark *A*, *B*, *C*; being indeed the *A*, *B*, *C*, of *Publick Economy*, and even of that *Policy* which tends to *Peace and Plenty*.

A *Observ-*

*Observations upon the Table A.*

1. **T**He Total of the *Burials in London*, (for the said Six straggling years mentioned in the Table A) is 120170; whereof the Medium or Sixth part is 20028; and exceeds the Burials of *Paris*, as may appear by the late Bills of that City.

2. The *Births*, for the same time, are 73683, the Medium or Sixth part whereof is 12280, which is about Five eighth parts of the *Burials*; and shews, that *London* would in time decrease quite away, were it not supplyed out of the *Country*, where are about Five *Births* for Four *Burials*, the proportion of Breeders in the *Country* being greater than in the *City*.

3. The *Burials in Dublin* for the said Six years, were 9865, the Sixth part or Medium whereof is, 1644, which is about the Twelfth part of the *London*-*Burials*; and about a Fifth part over. So as the people of *London* do hereby seem to be above Twelve times as many as those of *Dublin*.

4. The *Births* in the same time at *Dublin*, are 6157, the Sixth part or Medium whereof is 1026, which is also about five eighth parts of the 1644 *Burials*; which shews, that the propor-

proportion between *Burials* and *Births* are alike at *London* and *Dublin*, and that the Accompts are kept alike ; and consequently are likely to be true, there being no Confederacy for that purpose: Which if they be true, we then say,

5. That the *Births* are the best way (till the Accompts of the people shall be purposely taken) whereby to judge of the Increase and Decrease of People, that of *Burials* being subject to more Contingencies and variety of Causes.

6. If *Births* be as yet the measure of the People, and that the *Births* (as has been shewn) are as Five to Eight, then Eight fifths of the *Births* is the number of the *Burials*, where the year was not considerable for extraordinary Sickness or Salubrity ; and is the Rule whereby to measure the same. As for Example : The Medium of *Births* in *Dublin* was 1026, the Eight fifths whereof is 1641, but the real *Burials* were 1644 ; so as in the said years they differed little from the 1641, which was the *standard of Health* ; and consequently, the years 1680, 1674, and 1668, were *sickly* years, more or less, as they exceeded the said Number 1641 ; and the rest were *healthful* years, more or less, as they fell short of the same number. But the City was more or less *Populous*, as the *Births* diffe-

red from the Number 1026; *viz.* *Populosis* in the years 1680, 1679, 1678, & 1668: For other causes of this difference in Births, are very occult and uncertain.

7. What hath been said of *Dublin*, serves also for *London*.

8. It hath already been observ'd by the *London-Bills*, That there are more *Males* than *Females*. It is to be further noted, that in these Six *London-Bills* also, there is not one instance either in the Births or Burials to the contrary.

9. It hath been formerly observ'd, That in the years wherein most dye, fewest are born, & vice versa. The same may be further observ'd in *Males* and *Females*, *viz.* When fewest *Males* are born, then most dye: for here the *Males* dyed as Twelve to Eleven, which is above the mean proportion of Fourteen to Thirteen; but were born but as Nineteen to Eighteen, which is below the same.

### *Observations upon the Table B.*

1. ~~F~~rom the Table *B*, it appears, That the Medium of the Fifteen years Burials, (being 241.99) is 1613. whereas the Medium of the other six years in the Table *A*, was 1644, and that the Medium of the Fifteen years

years Births (being in all 14765) is 984, whereas the Medium of the said other six years, was 1026. That is to say, there were both fewer Births and Burials in these Fifteen years, than in the other six years; which is a probable sign that at a Medium there were fewer People also.

2. The Medium of *Births* for the Fifteen years being 984, whereof Eight fifths (being 1576) is the *Standard of Health* for the said Fifteen years; and the triple of the said 1576, being 4728, is the Standard for each of the Ternaries of the Fifteen years within the said Table.

3. That 2952, the triple of 984 Births, is for each Ternary the Standard of Peoples increase and decrease from the year 1666 to 1680 inclusive, *viz.* The People increased in the second Ternary, and decreased from the same in the Third and Fourth Ternarys, but re-increased in the Fifth Ternary beyond any other.

4. That the last Ternary was withal very healthful, the Burials being but 4624, *viz.* below 4728, the Standard.

5. That according to this proportion of increase, the Housing of *Dublin* have probably increased also.

## Observations upon the Table C.

1. First, from the Table C, it appears, 1. That the Housing of *Dublin* is such, as that there are not five Hearths in each House one with another, but nearer five than four.

2. That in *St. Warburghs* Parish are near six Hearths to an House. In *St. Johns* five. In *St. Michaels* above five. In *St. Nicholas* ~~within~~ above six. In *Christ-Church* above seven. In *St. James's*, and *St. Katherines*, and in *St. Michans*, not four. In *St. Kevans* about four.

3. That in *St. James's*, *St. Michans*, *St. Brides*, *St. Warburgh*, *St. Andrews*, *St. Michaels*, and *St. Patricks*, all the Christnings were but 350, and the Burials 1055, *viz.* near double; and that in the rest of the Parishes the Christnings were five, and the Burials seven, *viz.* as 457 to 634. Now whether the cause of this difference were negligence in Accompts, or the greatness of the Families, &c. is worth inquiring.

4. It is hard to say in what order (as to greatness) these Parishes ought to stand, some having most Families; some most Hearths, some most Births, and others most Burials. Some Parishes exceeding the rest in two, others

others in three of the said four particulars, but none in all four. Wherefore this Table ranketh them according to the plurality of the said four particulars wherein each excelleth the other.

5. The *London-Observations* reckon eight heads to be in each Family; according to which estimation, there are 32000 Souls in the 4000 Families of *Dublin*; which is but half of what most Men imagine; of which but about one sixth part are able to bear Arms, besides the Royal Regiment.

6. Without the knowledge of the true *number of People*, as a Principle, the whole scope and use of the keeping Bills of Births and Burials is impaired; wherefore by laborious Conjectures and Calculations to deduce the number of People from the Births and Burials, may be Ingenious, but very preposterous.

7. If the number of *Families in Dublin* be about 4000, then Ten Men, in one week (at the Charge of about Five pound, Surveying Eight Families in an hour) may directly, and without Algebra, make an Accomp't of the whole People, expressing their several Ages, Sex, Marriages, Title, Trade, Religion, &c. and those who survey the Hearths, or the Constables or Parish Clarks, (may, if required) do the same *ex officio*, and without other

the Charge, by the Command of the Chief Governor, the Diocesan, or the Mayor.

8. The Bills of *London* have since their beginning, admitted several Alterations and Improvements; and eight or ten pound *per annum* surcharge, would make the Bills of *Dublin* to exceed all others, and become an excellent Instrument of Government. To which purpose the Forms for Weekly, Quarterly, and Yearly Bills are humbly recommended, *viz.*

## N D O N.

## Births.

Anno.

|      | ales. | Males. | Females. |
|------|-------|--------|----------|
| 1680 | 44    | 6543   | 6199     |
| 1679 | 76    | 6247   | 6041     |
| 1678 | 77    | 6568   | 6033     |
| 1674 | 96    | 6113   | 5738     |
| 1672 | 70    | 6443   | 6120     |
| 1668 | 67    | 6073   | 5566     |
|      | 30    | 37992  | 35697    |

A

1671.

at a Medium.

T

|                     | Hearths. | Births. | Burials. |
|---------------------|----------|---------|----------|
| 1 St. Kather.       | 2399     | 161     | 290      |
| 2 St. Nichola       | 2348     | 207     | 262      |
| 3 St. Michan        | 2301     | 127     | 221      |
| 4 St. Andreu        | 2123     | 108     | 178      |
| 5 St. Bridge        | 1989     | 70      | 100      |
| 6 St. Johns,        | 1337     | 70      | 138      |
| 7 St. Warbi         | 1650     | 54      | 108      |
| 8 St. Audac         | 1081     | 53      | 121      |
| 9 St. Micha         | 793      | 44      | 59       |
| 10 St. Keave        | 433      | 64      | 133      |
| 11 St. Nicha        | 614      | 28      | 34       |
| 12 St. Patri        | 255      | 21      | 44       |
| 13 Christ-C         | 197      |         | 1        |
|                     | 17500    | 1013    | 1696     |
| Houses<br>estimated | 550      |         |          |
|                     | 18150    |         |          |

C

Yearly Bills of Mortality for

LONDON and DUBLIN.

| <i>Anno.</i>                        | Burials. | Burials. | Burials. | Burials. |
|-------------------------------------|----------|----------|----------|----------|
| 1680                                | 21053    | 12747    | 1826     | 1096     |
| 1679                                | 21730    | 12288    | 1397     | 1061     |
| 1678                                | 20678    | 12601    | 1401     | 1045     |
| 1674                                | 21201    | 11851    | 2106     | 942      |
| 1672                                | 18230    | 12563    | 1436     | 987      |
| 1668                                | 17278    | 11633    | 1699     | 1026     |
|                                     | 120170   | 73683    | 9865     | 6157     |
|                                     | 20028    | 12280    | 1644     | 1026     |
| The medium or fifth part whereof is |          |          |          |          |

L O N D O N .

| <i>Anno.</i> | Burials. | Burials. | Burials. | Burials. |
|--------------|----------|----------|----------|----------|
| 11039        | 10044    | 5543     | 6199     |          |
| 11154        | 10576    | 6247     | 6041     |          |
| 10681        | 9977     | 6568     | 6033     |          |
| 11000        | 10196    | 6113     | 5738     |          |
|              |          |          |          |          |
| 62545        | 57030    | 37992    | 35697    |          |
| 10424        | 9505     | 6332     | 5940     |          |

A

D U B L I N .

| <i>Anno.</i> | Burials. | Burials. | Burials. | In Ternaries of years. |
|--------------|----------|----------|----------|------------------------|
| 1666         | 1480     | 952      |          |                        |
| 1667         | 1642     | 1001     | 4821     | 2979                   |
| 1668         | 1699     | 1026     |          |                        |
| 1669         | 1666     | 1000     |          |                        |
| 1670         | 1713     | 1067     | 5353     | 3070                   |
| 1671         | 1974     | 1003     |          |                        |
| 1672         | 1436     | 967      |          |                        |
| 1673         | 1531     | 933      | 5073     | 2842                   |
| 1674         | 2106     | 942      |          |                        |
| 1675         | 1578     | 823      |          |                        |
| 1676         | 1391     | 952      | 4328     | 2672                   |
|              |          |          |          |                        |
| 1677         | 1359     | 897      |          |                        |
| 1678         | 1359     | 897      |          |                        |

B

|      |       |       |       |       |
|------|-------|-------|-------|-------|
| 1672 | 1370  | 623   | 4328  | 2672  |
| 1676 | 1391  | 952   | 4328  |       |
| 1677 | 1359  | 897   |       |       |
| 1678 | 1401  | 1045  |       |       |
| 1679 | 1397  | 1061  | 4624  | 3202  |
| 1680 | 1826  | 1096  |       |       |
|      |       |       |       |       |
|      | 24199 | 14765 | 24199 | 14765 |
|      | 1613  | 984   | 1613  | 984   |

The medium which  
part whereof is

### The Parishes of DUBLIN.

*Anno 1671.*

Families. Hearths.

|    |  |     | <i>Anno 1670, 71, &amp; 72.<br/>at a Medium.</i> |          |
|----|--|-----|--|----------|
|    |  |     | Births.  | Burials. |
| 1  | St. Katherins and St. James,                       | 661 | 2399   | 161      |
| 2  | St. Nicholas without,                              | 490 | 2348   | 207      |
| 3  | St. Michans,                                       | 656 | 2301   | 127      |
| 4  | St. Andrews with Donabroot,                        | 483 | 2123   | 108      |
| 5  | St. Bridgets,                                      | 416 | 1989   | 70       |
| 6  | St. Johns,   | 244 | 1337   | 70       |
| 7  | St. Warbrough,                                     | 267 | 1650   | 54       |
| 8  | St. Adaens,  | 216 | 1081   | 53       |
| 9  | St. Michael,                                       | 140 | 793  | 44       |
| 10 | St. Kerevens,                                      | 106 | 433  | 64       |
| 11 | St. Nicholas within,                               | 93  | 614  | 28       |
| 12 | St. Patrick's Liberties,                           | 52  | 255  | 21       |
| 13 | Christ-Church and Trinity-Colledge per estimate,   | 26  | 197  | 1        |
|    | Houses built between 1671, and 1681, pre-estimate, |     |  |          |
|    |  |     | 3850   | 1013     |
|    |  |     | 150  | 1013     |
|    |  |     | 4000   | 1696     |
|    |  |     | 550  |          |
|    |  |     | 18150  |          |

A Quarterly Bill of Mortality,  
Beginning and ending  
for the City of Dublin.

|                 |   |  |  |         |
|-----------------|---|--|--|---------|
| PARISHES Names. | All other Casualties.   |  |  |         |
|                 | Infants under 2 years old.  |  |  |         |
|                 | Aged above 70 years old.  |  |  |         |
|                 | Sudden death, Quinsey, Plurisie, Fever.   |  |  |         |
|                 | Stone, Gout, Dropsie, Consumption.  |  |  |         |
|                 | Plague, Small Pox, Spotted Fever, Measels.  |  |  |         |
|                 | Buried of { Above 60 years old.   |  |  |         |
|                 | { Under 16 years old.   |  |  |         |
|                 | Marriages.  |  |  |         |
|                 | 2. Births.  |  |  |         |
|                 | 1.  |  |  |         |
|                 | 1 St. Katherins and St. James,<br>2 St. Nicholas without,<br>3 St. Michans,<br>4 St. Andrews with Donabrook,<br>5 St. Bridgets,<br>6 St. Johns,<br>7 St. Warbrough,<br>8 St. Audaens,<br>9 St. Michael,<br>10 St. Keverens,<br>11 St. Nicholas within,<br>12 St. Patrick's Liberties,<br>13 Christ-Church and Trinity-Colledge, |  |  | Totals, |

A Weekly Bill of Mortality for the City of Dublin,  
Ending the day of 1681.

|                        |  |  |                |
|------------------------|--|--|----------------|
| Spotted Fever.         |  |  |                |
| Measles.               |  |  |                |
| Small Pox.             |  |  |                |
| Plague.                |  |  |                |
| Above 16 years old.    |  |  |                |
| Under 16 years old.    |  |  |                |
| Burials.               |  |  |                |
| Females.               |  |  |                |
| Males.                 |  |  |                |
| Births.                |  |  |                |
| <b>PARISHES Names.</b> | <b>1 St. Katherins and St. James,<br/>2 St. Nicholas without,<br/>3 St. Michans,<br/>4 St. Andrews with Donabrook,<br/>5 St. Bridgers,<br/>6 St. Johns,<br/>7 St. Warbrough,<br/>8 St. Audaens,<br/>9 St. Michael,<br/>10 St. Kerevens,<br/>11 St. Nicholas within,<br/>12 St. Patrick's Liberties,<br/>13 Christ-Church and Trinity-Colledge,</b> |  | <b>Totals.</b> |

# An Account of the People of *Dublin* for one year,

Ending the 24th of March, 168 $\frac{1}{2}$ .

|                           |  |  |
|---------------------------|--|--|
|                           | Marriages.   |  |
|                           | Burials.   |  |
|                           | Births.  |  |
| Of all other<br>Religions |  |  |
| Papists                   |  |  |
| Protestants               |  |  |
| Above 60 years<br>old.    |  |  |
| Under 16 years<br>old.    |  |  |
| Married persons.          |  |  |
| Whereof                   | Females.   |  |
|                           | Males.   |  |
| Number of Persons.        |  |  |
| PARISHES Names.           |  |  |
|                           | 1 St. <i>Katherins</i> and St. <i>James</i> ,<br>2 St. <i>Nicholas</i> without,<br>3 St. <i>Michans</i> ,<br>4 St. <i>Andrews</i> with <i>Donabrook</i> ,<br>5 St. <i>Bridgets</i> ,<br>6 St. <i>Johns</i> ,<br>7 St. <i>Warbrough</i> ,<br>8 St. <i>Audaens</i> ,<br>9 St. <i>Michael</i> ,<br>10 St. <i>Kearvens</i> ,<br>11 St. <i>Nicholas</i> within,<br>12 St. <i>Patrick's</i> Liberties,<br>13 St. <i>Chris</i> Church |  |

11 St. Nicholas within,  
12 St. Patrick's Liberties,  
13 Christ-Church and Trinity  
Colledge,

Totals,

## Casualties and Diseases.

Aged above 70 years.

Abortive and Still-born.

Childbed-women.

Convulsion.

Teeth.

Worms.

Gout, and Sciatica.

Stone.

Palsey.

Consumption, and French  
Pox.

Dropse, and Tympany.

Rickets, and Livergrown.

Head-ach, and Megrim.

Epilepsie, and Planet.

Fever, and Ague.

Pleurisie.

Quinsey.

Executed, Murder'd, Drown'd

Plague, and Spotted-Fever.

Gripping of the Guts.

Scowring, Vomiting, Bleed-  
ing.

Small Pox.

Measels.

Neither of all the other sorts.